IN THE CLAIMS

The following listing of claims will replace all prior listings or versions of claims in the application:

1. (Currently amended) A method of interleaving video data, comprising:

placing first pixel values from a first field of video data into alternating rows of pixels in a video frame; and

augmenting the video frame in the remaining rows of pixels in the video frame with replacement pixel values determined from the first pixel values and from second pixel values from a second field of video data, wherein augmenting the video frame includes:

selecting a sub-block of pixels centered on a current pixel of one of the remaining rows; and

determining an orientation of at least one edge of an image that includes the current pixel.

2. (Currently amended) The method of claim 1, wherein augmenting the video frame further comprises:

interpolating from the first pixel values in the video frame to provide interpolated pixel values in the remaining rows of pixels in the video frame between the alternating rows of pixels with the first pixel values;

selecting a sub-block of pixels centered on a current pixel;

selecting at least one spatial filter of a set of spatial filters based on the orientation of the at least one edge of the image;

determining a set of filter values from spatially filtering the sub-block of pixels with a set of spatial filters using the at least one spatial filter;

determining video values based on the set of filter values; and

determining a replacement pixel value for the interpolated pixel value based on the video values and a second pixel value from a second field of video data.

3. (Currently amended) The method of claim 2, wherein interpolating from the first pixel values comprises averaging the first pixel value from an immediately preceding row and one from an immediately following row to determine the interpolated pixel ~~value~~ values.

4. (Currently amended) The method of claim 2, wherein determining the set of filter values includes taking a ~~products~~ product of a set of spatial filter arrays and the sub-block of pixel values to form the set of filter values.

5. (Currently amended) The method of claim 4, wherein determining video values comprises:

determining an optimum filter value from the set of filter values; and
calculating a set of video values from the sub-block of pixel values in a fashion
determined by the optimum filter value.